

THE IBIS.

NINTH SERIES.

No. VI. APRIL 1908.

IX.—*A Second Contribution to the Ornithology of the Egyptian Soudan.* By A. L. BUTLER, F.Z.S., M.B.O.U., Superintendent of Game Preservation, Soudan Government.

SINCE writing the article on Soudan birds which appeared in 'The Ibis' for July 1905, I have been able to do some travelling on the Suakin side of the country, and in the northern part of the Bahr-el-Ghazal Province, neither of which localities I had visited previously. The information obtained on these journeys, and some additional notes from Khartoum, are embodied in the present paper.

The following recent articles on Soudan ornithology may be referred to in connexion with the present one, but to save space I have not given more detailed references :—

Capt. S. S. FLOWER.—Notes on the Fauna of the White Nile. P. Z. S. 1900, p. 950.

Mr. H. F. WITHERBY.—An Ornithological Expedition to the White Nile. Ibis, 1901, p. 237.

The Hon. N. C. ROTHSCHILD and Mr. A. F. R. WOLLASTON.—On a Collection of Birds from Shendi, Soudan. Ibis, 1902, p. 1.

Mr. W. R. OGILVIE-GRANT and Mr. R. McD. HAWKER.—On a Collection of Birds made on the White Nile. Ibis, 1902, p. 393.

Mr. A. L. BUTLER.—A Contribution to the Ornithology of the Egyptian Soudan. Ibis, 1905, p. 301.

Mr. A. L. BUTLER.—On the Red-tailed Bush-Lark, *Mirafraga erythropterygia* Strickl. Ibis, 1907, p. 467.

Mr. W. R. OGILVIE-GRANT.—On the Birds procured by Mr. W. N. McMillan's Expedition to the Sobat and Baro Rivers. *Ibis*, 1907, p. 578.

Mr. W. R. OGILVIE-GRANT.—Descriptions of Three new Species of Birds from the Bahr-el-Ghazal. *Bull. B. O. C.* vol. xxi. p. 16.

For specimens of some birds which I have not obtained myself I am indebted to Mr. G. B. Middleton, of the Steamers and Boats Department, Soudan Government, and to M. de Vilmorin, who kindly allowed me to select some skins from a small collection which he had made while shooting on the Upper Nile in February 1906.

For assistance in identifying specimens I am very grateful to Mr. W. R. Ogilvie-Grant and the assistants at the Natural History Museum, and also to Mr. M. J. Nicoll, Assistant Director of the Giza Zoological Gardens.

Brief itineraries of my two journeys alluded to in this paper may be useful in giving the reader an idea of the relative positions of the places mentioned, many of which are not of sufficient importance to be found on ordinary maps.

Journey from Suakin to Kassala, &c. (March to May, 1906).

From Suakin I travelled twenty-five miles south along the scrub-covered sandy plain between the mountains and the sea, then turned south-west up the Khor Dahand Valley for three miles, and up the steep Kolkilai Pass (five or six miles) on to the Erkowit plateau. The top of the hill is covered with grass and Euphorbias; rocky "kopjes," frequented by Klipspringers, are scattered about; and there are plenty of trees as well as a good deal of vegetation in the ravines, especially those on the eastern side of the range, which gets the damp atmosphere from the sea. The general elevation of the plateau is just over 3000 feet, but the highest points on it rise to 5077 and 4293 feet. The climate is delightful, and a small hill-station is now being made there. Noticeable birds on this hill are *Francolinus erckeli*, *Zosterops abyssinica*, *Cinnyris habessinicus*, &c.

A few miles south of Erkowit the hills become much more

rugged and barren; vegetation is scanty and mostly confined to the bottoms of the ravines. The Klipspringer gives place to the Nubian Ibex and Salt's Dik-dik, while the birds just mentioned gradually disappear. The little *Ammoperdix cholmleyi* succeeds the big Francolin, and small Passerine birds are scarce. I followed a large ravine, the Khor Ashat, eastwards out of the hills, emerging on to the maritime plain again thirty-six miles south of Suakin, and then turned south towards Kassala. (From Suakin to Kassala is three hundred miles.)

From Suakin to Jebel Maman (seventy-six miles N. of Kassala) the country is, on the whole, very barren, the track running over sandy or stony ground, and skirting bare, rocky hills. Several broad, shallow, sandy "khors," fringed with Dom-palms and tamarisk, are crossed. This coast-plain is inhabited by Sæmmerring's and Isabelline Gazelles and wild asses, with Dik-dik at the "khors."

From Jebel Maman the country changes to black-cotton soil and carries much more bush. Such species as *Ammoperdix cholmleyi*, *Rhodophoneus cruentus*, *Argya acaciæ*, and *Pyrrhulanda melanauchen* disappear, and *Corvus scapulatus*, *Coracias abyssinicus*, *Laniarius erythrogaster*, &c. are at once met with, while Henglin's Gazelle almost entirely replaces the Isabelline. Here we turned a little south-west to a place called Filik, to try for a lion, and my cousin, Mr. H. Boughton Leigh, who was with me, got a lion and a lioness. I do not think that they range much further north than this, but south along the Atbara they are numerous. From Kassala we went west to the Atbara (40 miles), followed the river to Tomat (56 miles), crossed to Gedaref (45 miles), from there to Wad Medani on the Blue Nile (146 miles), and returned down the river by steamer to Khartoum.

Journey in the Bahr-el-Ghazal Province
(January to April, 1907).

From Meshra-el-Rek to Wau* the general direction of the road is south-west, and the distance about a hundred

* Wau, 7° 41' 50" N. lat., 28° 2' 58" E. long.

and sixteen miles. The following is the order of intermediate points at which I collected specimens:—Meshra, Amien, Madâl, Mayik, Menyah, Gameiza, Gardein, Bir-el-Girûd, Dug Dug, Doleiba, Ayûm, Moyen, Makwak, Wau.

Wau, a prettily-situated station on the Jur River, is the neadquarters of government in the Bahr-el-Ghazal Province. The intermediate places are either Dinka or Jur villages of no great size, or merely halting-places where huts have been built and wells dug, near selected shade-trees when possible. From Meshra to Ayûm the natives are Dinkas, and after that Jurs.

From Meshra to Ayûm the country is flat, open, grass-covered, and alluvial, with some thorn-bush and scattered trees and "Doleib" palms at intervals. On the whole, it is mostly very open plain. Just beyond Ayûm, and some thirty-five miles before reaching Wau, the country suddenly changes to an ironstone formation, covered with fairly high open forest. Excepting for small plains bordering rivers, and the channels of "khors," this ironstone forest-country continues the whole way to Chak Chak, and south-west to Dem Zubeir. The change in the country and vegetation at Ayûm is naturally associated with a change in the animal- and bird-life, and many truly forest species are first met with at this point. Among large mammals, for instance, Heuglin's Hartebeest (*Bubalis lehwel*) at once takes the place of *Damaliscus tiang* on the alluvial. Among birds the red-legged *Francolinus gedgii* Grant at once gives place to the yellow-legged *F. icterorhynchus* Heugl. and the Stone-fowl, *Ptilopachis fuscus* (Vieill.), while changes among the smaller species are equally noticeable.

From Wau to Chak Chak * (a small station on the Chell River) the direction is north-west, and the distance about the same as from Meshra to Wau—perhaps a hundred and twenty miles. Intermediate points mentioned in this paper are, from Wau: Buvâl, Khor Gitti, Bringi's, Kuanga's, Sheik Zaid, Bedari's Village (where the Pongo or Bongo River is

* Chak Chak, 8° 41' 0" N. lat., 26° 51' 50" E. long.

crossed), Ofio's, and Chak Chak. The natives along this route are mostly Jurs and Golo, with Niam-Niams on the Pongo, and Dinkas again at Chak Chak. The names given are mostly those of villages of considerable size.

At the Khor Gitti I was on what is, to a naturalist, classic ground. Here Theodor von Heuglin spent nine months in 1863, and doubtless explored and collected as happily as I did, though novelties were more plentiful forty-four years ago. Here, also in 1863, Dr. Steudner died; and here the unfortunate, brave-hearted Miss Tinné spent the miserable weeks which ended in her mother's death in this remote spot. From the work of another famous follower in their steps, Dr. Georg Schweinfurth, I have gathered the details of the past ('Heart of Africa,' vol. ii. p. 199).

From Chak Chak we went about fifty miles south-west towards Dem Zubeir *, keeping E. of the Chell River, and wandered about exploring the open "khors" which intersect this forest-country and drain into the Chell. The natives of the few villages here are Kreish. We returned to Meshra by the same route, with a short deviation to the Jur village of Dud Majok, about twenty-five miles north-west of Wau.

On this journey I was accompanied by a friend, Mr. Gilbert Blaine, who had with him his English falconer, Best. The latter also collected birds and made very good skins of them, but confined himself mostly to Hawks and brightly-coloured species.

Best's want of success in trapping mammals was the subject of a good deal of chaff from me, until one day he succeeded in catching a full-grown male leopard in a half-crown rabbit-trap set for a mongoose, whereafter I had to hold my peace!

The Bahr-el-Ghazal is rather a bad country for insect pests, which are a considerable drawback to collecting and preserving specimens. The most enthusiastic ornithologist cannot remain long staring up into a thickly-foliaged tree while the tsetse-flies are lining up in rows on his face, neck,

* Dem Zubeir, 7° 43' 30" N. lat., 26° 8' 30" E. long.

and hands, and hundreds of minute bees (of the genus *Melipona*—fortunately stingless!) are trying to drink the moisture from his eyes! And in camp, honey-bees, attracted by the water, crawled over me in scores while I was preparing skins, and, in spite of caution, in skinning a specimen of *Cerchneis ardesiacus* I got stung on the hands four times.

When it came to trapping small mammals, the site of a successful trap was generally marked by a black mass as large as a mole-hill, composed entirely of ants, which furiously resisted the recovery of the trap and the useless remains of the unfortunate little mouse or shrew in it!

I have given localities and dates as accurately as possible, even with regard to common species, as these records appear to me to be very necessary to an ultimate understanding of the distribution and migrations of our Soudan birds.

Specimens which I have collected *since* writing my previous paper are listed under their names.

1. *NECTARINIA PLATURA* Vicill.

a. ♂. Moyen, 21. 1. 07.

This Sun-bird was frequently met with throughout my journey in the Bahr-el-Ghazal Province. Males were in full plumage.

2. *NECTARINIA PULCHELLA* (Linn.).

a. ♂ juv. Chak Chak, 18. 2. 07.

b. ♂ juv. Pongo River, 3. 2. 07.

At Khartoum some of these Sun-birds had assumed the full breeding-plumage by October 10th, 1906, and they, or others, were still in it throughout May 1907. They were also common throughout the forest-country in the Bahr-el-Ghazal Province on my line of march, but seem to breed at a different season in that region, probably in the summer rains, as between January and April I did not see a single male in full plumage.

3. *CINNYRIS HABESSINICUS* (Hempr. & Ehr.).

a. ♂. Erkowit, Suakin, 24. 3. 06.

b. ♂. " " "

c. ♂. " " "

The Abyssinian Sun-bird was abundant on the Erkowit Hill in March, when the males were in full plumage. I never saw them below about 2000 ft., and about half-a-day's march into the more barren Gamilab Hills south of Erkowit they disappeared entirely.

4. *CINNYRIS ERYTHROCERIUS* (Heugl.)?

I saw a few of these Sun-birds at one locality only in the Bahr-el-Ghazal country—between Moyén and Wau. I shot a male in breeding-plumage on January 3rd, but unfortunately knocked it to pieces and did not keep it. I did not see the bird again beyond Wau, and on my return journey I was ill with fever at the point where it had occurred before, and was not able to look for it again.

5. *CHALCOMITRA ACIK* (Antin.).

- a. ♂. Kuanga's, 2. 2. 07.
- b. ♂. Makwak, 22. 1. 07.
- c. ♂. Wau, 24. 1. 07.
- d. ♂ juv. Chak Chak, 16. 2. 07.
- e. ♀. Chak Chak, 14. 2. 07.
- f. ♀. Makwak, 1. 4. 07.

The Acik Scarlet-chested Sun-bird was very common in the ironstone forest-country from Ayûm to Chak Chak, from January to the beginning of April. It is one of the most beautiful Sun-birds that I have ever met with. The Golo natives call it "Cho-cho." Antinori considered it a migrant to this district from the south, arriving in February and leaving again in the middle of April. I left this part of the country just at that time myself, but I think that it is more probably a resident species, easily overlooked in the luxuriant vegetation of the rainy season when out of breeding-plumage.

6. *ANTHOTHREPTES LONGUEMARI* (Less.).

- a. ♂. Khor Gitti, 30. 1. 07.
- b. ♂. Pongo River, 4. 2. 07.
- c. ♂. Chak Chak, 1. 3. 07.

The Western Violet-backed Sun-bird was fairly common from Wau to Chak Chak and thence towards Dem Zubeir.

Captain Shelley only traces the range of this species as far north as Sassa in the Niam-Niam Country, and says that *A. orientalis* Hartl. certainly replaces it in the Nile watershed. According to him, it was *A. orientalis* which Von Heuglin obtained near Wau, and Antinori near the Bahr-el-Ghazal River. The birds which I collected in this district, however, certainly belong to the Western form. Chak Chak is about 4 degrees farther north than Sassa.

7. *ZOSTEROPS SENEGALENSIS* Bp.

a. ♂. Pongo River, 22. 3. 07.

I found this White-eye common along my route in the Bahr-el-Ghazal country. The birds were first noticed at Amien, occurred again at Wau, and were met with daily afterwards. They were especially plentiful in a kind of thick bush which fringed the Khor Gitti.

8. *ZOSTEROPS ABYSSINICA* Guér.

a. ♂. Erkowit, 29. 3. 06.

The Abyssinian White-eye was common on the Erkowit Hill, from near the foot of the Kolkilai Pass to the summit—about 4000 ft. It was met with in flocks, actively working about among the vegetation in the ravines, and was absent from the more barren hills immediately south.

9. *PARUS LEUCOMELAS* Rüpp.

a. ♂. Menyah, 16. 1. 07.

The Northern Black Tit was common between Meshra-el-Rek and Wau, and in the more open parts of the country from there to Chak Chak.

10. *PARISOMA PLUMBEUM* (Hartl.).

a. ♀. Khor Gitti, 29. 1. 07.

b. ♀. Chak Chak, 12. 2. 07.

c. ♀. „ 27. 2. 07.

Met with on several occasions between Wau and Chak Chak, though I never saw more than one at a time. It was generally flitting about on branches, with half-expanded wings and expanded tail, the white outer rectrices being displayed conspicuously.

11. *MOTACILLA VIDUA* Sundev.

I noted the White-winged Wagtail on the Jur River at Wau in January and again in March. It frequently entered the verandahs of houses close to the water. I also found the bird on the Chell River at Chak Chak in February and March. The rivers are rocky just at both these localities. Indeed, this Wagtail is hardly ever seen away from rocks.

12. *MOTACILLA ALBA* Linn.

a. ♀. Khartoum, 4. 11. 07.

The White Wagtails arrived at Khartoum in 1905 on October 21st. In 1906 I did not notice them till the 23rd, on the morning of which day they were plentiful. In 1907 I observed them on the 22nd. In the Bahr-el-Ghazal country I only noticed them at Chak Chak and at Meshra-el-Rek (April 12th, 1907). They all disappeared from Khartoum by the first week in May. They were common at Suakin and at Erkowit in March 1906.

13. *MOTACILLA MELANOPE* Pall.

Since writing my first notes I have only seen the Grey Wagtail a few times in Khartoum—on Nov. 10th, 1905, Nov. 20th, 1906, Sept. 28th and 29th, 1907, and two or three times in November of the same year.

14. *MOTACILLA FLAVA* Linn.

a. ♀. Khartoum, 5. 11. 07.

b. ♂. „ 16. 11. 07.

c. ♂. „ 2. 11. 07.

d. ♂. „ „

15. *MOTACILLA BOREALIS* Sundev.

a. ♂. Khartoum, 30. 10. 07.

16. *MOTACILLA CINEREICAPILLA* Savi.

a. ♂. Gameiza, 8. 4. 07.

Owing to the thickly-forested nature of most of the country, and to the scarcity of water on the plains at the time of my visit, I saw very few Yellow Wagtails in the Bahr-el-Ghazal country. A quantity appeared at the pools in a "khor" between Chak Chak and Dem Zubeir on

March 11th, but the only other individual noticed was that shot at Gameiza on April 8th.

17. *ANTHUS TRIVIALIS* (Linn.).

a. ♂. Khartoum, 29. 9. 07.

b. ♂. „ 30. 9. 07.

I saw the Tree-Pipit a few times between Wau and Chak Chak in February and March. It was abundant at Khartoum at the end of September and in October 1907.

18. *ANTHUS SORDIDUS* Rüpp.

a. ♂. Erkowit, 28. 3. 06.

The only specimen that I have met with. It was running actively about on boulders of rock at an elevation of nearly 4000 ft.

19. *ANTHUS CAMPESTRIS* (Linn.).

The Tawny Pipit was common at Suakin and on Erkowit in March 1906. I did not see it in the Bahr-el-Ghazal country.

20. *ANTHUS CERVINUS* (Pall.).

a. ♂. Khartoum, 28. 10. 07.

b. ♀. „ „

c. ♂. „ 30. 10. 07.

The same remarks apply to the Red-throated Pipit.

21. *ALÆMON ALAUDIPES* (Desf.).

a. ♂. Omdurman, 8. 11. 07.

b. ♂. „ „

c. ♂. „ „

All three of these individuals were in breeding condition.

22. *CALANDRELLA BRACHYDACTYLA* (Leisler).

a. ♂. Khartoum, 18. 11. 07.

23. *HELIOCORYS MODESTA* Heugl.

a. ♂ juv. Kuanga's, 2. 2. 07.

b. ♂ juv. Khor Gitti, 30. 1. 07.

c. ♀. Chak Chak Road, 10. 2. 07.

d. ♀. Wau, 23. 1. 07.

e. ♂. Khor Gitti, 31. 1. 07.

Between Wau and Chak Chak and thence towards Dem Zubeir this little Bush-Lark was fairly common on open patches and clearings in the forest. It was generally in parties of four or five, consisting of pairs of old birds with spotted young recently fledged. Its habits are those of a *Mirafra*.

24. *MIRAFRA FISCHERI* (Reichen.).

a. ♂. Makwak, 21. 1. 07.

This specimen was the only one seen during my Bahr-el-Ghazal trip. It was running about on a burnt dhurra clearing, and shewed considerable cunning, when pursued, in the way that it took advantage of what little cover there was, always keeping behind a few stems of the *Sorghum*.

25. *MIRAFRA ERYTHROPYGIA* (Strickl.).

a. ♂ (breeding). 20 miles E. of the Pongo, 3. 2. 07.

b. ♂ (apparently breeding). Pongo River, 5. 2. 07.

c. ♂ (not breeding). Pongo River, 5. 2. 07.

d. ♂ " " "

e. ♂ " " "

My notes on the Red-tailed Bush-Lark have already appeared in 'The Ibis' (1907, p. 467). Between Gardein and Wau, Wau and Chak Chak, and thence to Dem Zubeir it was numerous and quite the commonest of the Lark family.

26. *GALERITA CRISTATA* (Linn.).

a. ♂. Khartoum, 3. 11. 07.

b. ♂. " 5. 11. 07.

c. ♂. " 23. 11. 07.

d. ♂. " 20. 11. 07.

e. ♂. " 5. 11. 07.

Crested Larks were abundant at Suakin, round the town and along the sea-shore, when I was there in March 1906. They were equally plentiful up on Erkowit at 4000 ft. These were darker birds than the Khartoum form (*G. c. flava* Brehm), and looked to me very like the Assouan birds (*G. c. maculata* Brehm). I regret that I did not shoot any

specimens. I saw no Crested Larks in the Bahr-el-Ghazal Province.

27. *PYRRHULAUDA BUTLERI* Shelley.

a. ♂. Omdurman, 8. 11. 07.

b. ♂. " "

Common in the desert behind Omdurman. I have never seen it on the Khartoum side of the river.

28. *PYRRHULAUDA MELANAUCHEN* (Cab.).

I found this the common Finch-Lark at Suakin and along the maritime plain to the south, between the mountains and the sea. I shot four or five specimens, but they were moulting, so I did not skin any.

They were identical with Captain Flower's birds, which I mentioned in 'The Ibis' for 1905, p. 311.

29. *PYRRHULAUDA MELANOCEPHALA* (Licht.).

a. ♂. Khartoum, 1. 11. 07.

b. ♂. " "

c. ♂. " 16. 11. 07.

d. ♀. " 31. 10. 07.

e. ♀. " 19. 11. 07.

I occasionally met with small parties of this Finch-Lark on the road between Meshra-el-Rck and Chak Chak, but they were distinctly scarce. I shot one male to examine at Chak Chak.

Mr. Grant ('Ibis,' 1907, p. 586) says:—"With one exception, which shews a trace of black feathers among the wing-coverts, all the birds from Khartoum in the British Museum appear to be typical *P. melanocephala*." I have seen many of the Khartoum birds almost daily for seven years, and more or less black—sometimes a very conspicuous patch—on the wing-coverts is the rule, as in birds from Berber, Merowe, and Shendi.

30. *EMBERIZA FLAVIGASTRA* Rüpp.

a. ♂. Pongo River, 3. 2. 07.

The Yellow-bellied Bunting was met with a few times between Wau and Chak Chak, but seemed scarce in this district.

31. *EMBERIZA CÆSIA* Cretzschm.

Cretzschmar's Bunting was abundant in the gardens at Suakin on March 20th, 1906, and on the summit of Erkowit during the next ten days. I did not see it in the Bahr-el-Ghazal country.

32. *EMBERIZA SEPTEM-STRIATA* Rüpp.

a. ♂. Erkowit, 29. 3. 06.

Common on the rocky *Euphorbia*-covered "kopjes" on the Erkowit plateau (March 1906). Abundant in March 1907 on rocky hills between Chak Chak and Dem Zubeir.

33. *PETRONIA DENTATA* (Sundev.).

a. ♀. Chak Chak, 18. 2. 07.

b. ♂. „ 9. 2. 07.

c. ♂ juv. „ 18. 3. 07.

The Lesser Rock-Sparrow was common between Wau and Chak Chak, and was especially abundant in the bush round the latter station. It is quite a *Bush-Sparrow* in habits.

34. *PASSER DIFFUSUS* (Smith).

a. ♂. Chak Chak, 9. 2. 07.

This *Bush-Sparrow* was abundant in the Bahr-el-Ghazal forests.

35. *PASSER DOMESTICUS RUFIDORSALIS* Brehm.

This form does not appear to extend to the Bahr-el-Ghazal.

I have one old female which shews a distinct dark patch on the throat, in this respect closely resembling a very young male.

36. *SERINUS ICTERUS* (Bonn. et Vieill.).

a. ♂. Wau, 24. 1. 07.

b. ♂. Chak Chak, 15. 2. 07.

c. ♂. Menyah, 16. 1. 07.

These Yellow-fronted Serin-Finches were met with very soon after leaving Meshra, and were common as far as Chak Chak. They were generally in company with other small birds, and shewed a preference for broad-leaved sycamore-like trees.

37. *SERINUS LEUCOPYGIUS* (Sundev.).

I saw small parties of the White-rumped Grey Serin-Finch between Meshra and Chak Chak, but it was not nearly so common in that district as the green-and-yellow *S. icterus*.

38. *POLIOSPIZA CANICAPILLA* Du Bus.

a. ♀. Bringi's, 1. 2. 07.

Numbers of this Finch were collected to roost in some high trees behind Bringi's Village on the evening when I arrived there. I shot two or three, but they were in full moult, and I only kept one for identification. I did not meet with the bird again.

39. *VIDUA SERINA* (Linn.).

Small flocks of this Widow-Bird, in winter plumage, were met with at Wau, Chak Chak, and the intermediate villages near water (February and March, 1907).

40. *STEGANURA PARADISEA* (Linn.).

Met with from Meshra to Chak Chak. I shot a male in full plumage at the latter station on Feb. 15th, but only saw individuals with long tails two or three times.

41. *COLIOPASSER MACRURUS* (Gm.).

a. ♂. Chak Chak, 28. 2. 07.

These Weavers, in winter plumage, were abundant in large flocks at the Khor Gitti, Kuanga's, the Pongo and Chell Rivers, &c., generally keeping to the vicinity of water. Except for their chrome-yellow, instead of orange, shoulders they looked very similar on the wing to the next species.

42. *UROBRACHYA PHÆNICEA* (Heugl.).

Abundant in the papyrus- and grass-swamps along the Bahr-el-Ghazal River, but not seen after we started inland from Meshra.

43. *PYROMELANA FRANCISCANA* (Isert).

a. ♂. Gardein, 5. 4. 07.

b. ♀. " "

c. ♂. Khartoum, 20. 11. 07 (breeding-plumage).

Met with in large flocks, in winter plumage, at various points between Meshra and Chak Chak.

44. SPERMESTES CUCULLATUS Swains.

a. ♂. Khor Gitti, 1. 2. 07.

I only saw the Bronze-shouldered Manikin once, a single bird which I shot at the Khor Gitti. It was associating with a flight of Weaver-Finches (*Pyromelana*).

45. UROLONCHIA CANTANS (Gm.).

46. ESTRILDA PHÆNICOTIS Swains.

Both these birds were common from Meshra to Chak Chak, the latter especially so.

47. ESTRILDA CINEREA (Vieill.).

a. ♂. Chak Chak, 12. 2. 07.

Large flocks of the Common Black-rumped Waxbill were constantly met with from Meshra to Chak Chak. Mr. Middleton has sent it to me from Bor.

48. ESTRILDA PALUDICOLA Heugl.

a. ♂. Khor Kobshum, 5. 3. 07.

b. ♀. " " "

c. ♀. " " 6. 3. 07.

Heuglin's Waxbill was common near the Jur River and in the Khor Kobshum, south of Chak Chak. At the latter place we camped close to a large rock-pool, where the bushes round us were always alive with a chirping host of these little Waxbills during the heat of the day.

49. LAGONOSTICTA BRUNNEICEPS Sharpe.

I saw this Fire-Finch in the Bahr-el-Ghazal Province at Meshra, Wau, and Chak Chak.

50. LAGONOSTICTA LARVATA Rüpp.

Lagonosticta nigricollis Butler, Ibis, 1905, p. 321.

By a slip of the pen, I think, Captain Shelley gave me the name *L. nigricollis* as that of a little Finch which I shot at Gallabat on April 15th, 1903. In his 'Birds of Africa' (vol. ii. pt. i. p. 225) it is, however, identified, and correctly, as *Lagonosticta larvata*, but the date is wrongly given as March 13th, 1899, at which time I was in the Malay Peninsula.

51. LAGONOSTICTA BUTLERI Grant.

- a. ♀. Chak Chak, 15. 2. 07. } Types.
 b. ♀. „ 17. 2. 07. }

Fairly common in the forests from Wau to Chak Chak. I could have procured a good series had I known that the species was new, and it was rather a surprise to me that it proved undescribed. (See Grant, Bull. B. O. C. xxi. p. 16.)

52. PYTELIA CITERIOR Strickl.

- a. ♂. Chak Chak Road, 12. 2. 07.
 b. ♀. Pongo River, 5. 2. 07.

This Red-faced Finch was seen at most places where there was thorn-bush from Meshra to Chak Chak.

In the male specimen the red on the head surrounds the eye; there is no trace of the white bars becoming *spots* on the crop; the under tail-coverts are unbarred white; the flanks are barred with olive-brown and have a greenish suffusion.

In the female there is dull orange-red patch on each side of the forehead between the eye and the nostril; the chin and throat are ashy grey; the under tail-coverts are unbarred white.

This is much the most widely distributed form of *Pytelia* in the Soudan.

53. PYTELIA SOUDANENSIS Sharpe.

- a. ♂. Bor, Upper Nile, 7. 5. 06.

Collected for me by Mr. G. B. Middleton.

The red on the head only reaches to the front of the eye; there is rather more red on the throat than in *P. citerior* Strickl.; the white bars become twin *spots* on the crop; the flanks are white, more heavily barred with blackish brown, and with no greenish tinge; the lower tail-coverts are barred with brown.

The type of *Pytelia jessei* Shelley, which I examined in the Natural History Museum, appears to me identical with this bird.

54. PLOCEIPASSER SUPERCILIOSUS (Rüpp.).

- a. ♀. Chak Chak Road, 11. 2. 07.
 b. ♂. Khor Gitti, 24. 3. 07.

This Sparrow-Weaver was abundant in the forest country from Ayûm to Chak Chak.

55. ANAPLECTES MELANOTIS (Lafr.).

I saw one or two males of an *Anaplectes*, probably one of the forms of this species, at the Khor Gitti in February, but did not manage to shoot a specimen. They were in breeding-plumage, with scarlet head and breast and black cheek-patches. I met with them in the forest only, where they entirely to the tops of the trees.

56. HYPHANTORNIS GALBULA Rüpp.

a. ♂. Erkowit, 24.3.06.

These Weaver-Birds were common at Suakin in April and May, breeding in the *Parkinsonia*-trees in the vegetable gardens outside the town. They were also abundant on Erkowit, nesting in trees in the ravines and valleys.

57. HYPHANTORNIS BADIUS Cassin.

a. ♂. Bor, 10.5.06.

I am indebted to Mr. G. B. Middleton, of the Steamers and Boats Department, Soudan Government, for a specimen of Cassin's Weaver-Bird in breeding-plumage. I have not come across it myself.

58. ORIOLUS AURATUS Vieill.

a. ♂. Near Wau, 28.1.07.

b. ♂. Khor Gitti, 30.1.07.

The African Golden Oriole was abundant between Wau and Chak Chak from January to March.

59. LAMPROTORNIS CAUDATUS (P. L. S. Müll.).

a. ♂. Wau, 24.1.07.

b. ♂. Chak Chak, 12.2.07.

This long-tailed Glossy Starling was common on the ironstone country between Wau and Chak Chak. This is the species, as Mr. Grant correctly surmises ('Ibis,' 1907, p. 581), which I met with near El Obeid in Kordofan, and which, I regret to say, I referred to in my previous paper ('Ibis,' 1905, p. 324) as "undoubtedly the true *L. aeneocephalus*."

Further attention to the Soudan Starlings of this genus in the wild state, and an examination of the specimens in the Natural History Museum, have convinced me that Mr. Grant's remarks ('Ibis,' 1902, pp. 401-402) on the distinctions between, and the geographical distribution of, *L. porphyropterus* Rüpp. and *L. æneocephalus* Heugl. were perfectly correct, while the doubts I expressed ('Ibis,' 1905, p. 324) as to their distinctness were wrong. Indeed, the two birds can be distinguished at some distance, when one has become familiar with both.

60. *LAMPROTORNIS PORPHYROPTERUS* Rüpp.

a. ♂. Gardein, 7. 4. 07.

b. ♂. " "

This was the common Glossy Starling on the open country between Meshra and Ayûm, but directly the forests of the ironstone country were reached its place appeared to be entirely taken by *L. caudatus* (P. L. S. Müll.).

61. *LAMPROTORNIS ÆNEOCEPHALUS* Heugl.

I noticed a pair of these Starlings in the town of Khartoum almost daily during October 1907. As a result of the growth of trees and gardens in the new Khartoum some bush-frequenting birds, such as this species, *Lophoceros nasutus*, and *L. erythrorhynchus*, may now be seen occasionally in the town itself, while others, such as *Colius macrurus*, which were there formerly, have greatly increased in numbers.

62. *LAMPROCOLIUS SYCOBIUS* (Licht.).

a. ♂. Chak Chak, 9. 2. 07.

b. ♂. Moyen, 21. 1. 07.

These Starlings were abundant from Ayûm to Chak Chak, assembling in large flocks to feed on the fruit of the *Ficus* locally known as "Gameiza."

63. *LAMPROCOLIUS PURPUREUS* (P. L. S. Müll.).

a. ♂. Chak Chak, 20. 2. 07.

Abundant between Wau and Chak Chak. This Starling has a conspicuously large, prominent, and brilliant yellow eye.

64. SPREO SUPERBUS (Rüpp.).

M. de Vilmorin shewed me a skin of this Starling which he had obtained at Bor on the Upper White Nile in January 1906.

65. CORVUS SCAPULATUS Sundev.

When marching from Suakin to Kassala in 1906 I found the northward range of the White-bellied Crow very abruptly defined. There were hundreds round the wells at Jebel Maman, and after that it was met with everywhere to Kassala, thence to the Blue Nile and down that river. North of Jebel Maman I only saw a single individual—about thirty miles nearer Suakin. I believe that it is abundant at Tokar, but rare north of it. Mr. G. Kerr, who was Senior Inspector at Suakin, told me that he had seen the bird there once only. It was plentiful in the Bahr-el-Ghazal Province wherever I went. I saw no Black Crows there.

66. CORVUS AFFINIS Rüpp.

a. ♂. Erkowit, 24.3.06.

This broad-winged, short-tailed Raven was common on the heights along the Red Sea Railway towards Suakin, at Suakin, on Erkowit, and in the hill-country southwards. It was also met with on the hill at Kassala. Though mostly a highland species it often came down to our camps on the Suakin plain, in company with *Corvus umbrinus* Sundev., but I never saw the latter species up in the hills. *C. affinis* has a rather musical rolling croak, quite different to the voice of *C. umbrinus*.

67. CORVUS UMBRINUS Sundev.

The Brown-necked Raven is plentiful on the maritime plain south of Suakin. It is very easily distinguished from *C. affinis* by its longer, narrower wings and longer tail.

68. CRYPTORHINA AFRA (Linn.).

a. ♂. Tewfikia, 10. 1. 07.

b. ♀. " "

c. ♀. " "

d. ? " "

On landing at the little station of Tewfikia on Jan, 10th

I was greatly surprised to find these birds established there in considerable numbers. They were very tame and familiar, walking about fearlessly close to the houses, sitting in rows on the corrugated-iron roofs, or collecting in parties in the *Borassus* palms. They watched our donkeys being landed from the steamer for a run, and followed them about, settling on their backs like Starlings.

In one place a group of about a dozen were evincing the greatest excitement over a wind-blown scrap of pink paper which had aroused their curiosity. I have never seen the bird on this part of the White Nile before, and when I visited Tewfikia in February 1902 and February 1905 there were certainly none there.

A few miles from Tewfikia the American Mission has a station at a beautiful group of "Doleib" palms (*Borassus*), and I hear that these birds are abundant there now. I knew the spot before the Mission Station was established and never saw one there. In the Bahr-el-Ghazal Province they were generally in evidence wherever there were "Doleib" palms, a native village, and domestic animals. I noted them constantly from Mayik to the Pongo. I think that they would make capital aviary birds, as they are naturally bold and inquisitive, and have an engagingly jaunty manner. I did not notice them attending game animals in the same way that they follow donkeys and cattle. The colouring of the bill appears to be dependent on age and not sex. Of my four birds, a male and a female had the flesh-coloured bills, and a female and a bird of doubtful sex black bills.

69. *DICRURUS AFER* (Licht.).

a. ♀. Chak Chak, 12. 2. 07.

This Drongo-Shrike was abundant from Meshra to Chak Chak.

70. *PRIONOPS POLIOCEPHALUS* (Stanley).

a. ♂. } Khor Gitti, 30. 1. 07.

b. ♂. }

c. ♀. Moyen, 3. 4. 07.

This Helmeted Shrike was common between Wau and

Chak Chak, generally in parties of seven or eight individuals.

71. *GRAUCALUS PECTORALIS* Jard. & Selby.

- a. ♂. Khor Gitti, 30. 1. 07.
 b. ♀. Wau, 24. 1. 07.
 c. ♀. Near Chak Chak, 19. 3. 07.

These Cuckoo-Shrikes were fairly common in the Bahr-el-Ghazal forests along our line of march.

72. *CORVINELLA CORVINA* (Shaw).

- a. ♀. Chak Chak, 13. 2. 07.
 b. ♀. „ 15. 2. 07.
 c. ♀. „ 17. 2. 07.
 d. ♀. Khor Gitti, 31. 1. 07.
 e. ♀. „ 24. 3. 07.

These birds were constantly met with in the forests between Wau and Chak Chak, generally in parties of seven or eight, which played a game of "follow my leader" among the tree-tops. They were nearly always remarkably wary and it was difficult to get within shot of them.

C. affinis Heugl., the Eastern form, to which my birds belong, seems hardly specifically separable from *C. corvina* Shaw, with which Dr. Reichenow has united it.

73. *FISCUS EXCUBITORIUS* (Des Murs).

- a. ♂. Chak Chak, 17. 2. 07.

This gregarious Shrike was very much in evidence in the open country from Meshra to Wau, sitting in rows on the telegraph-wires. It was also common along the Pongo and Chell Rivers.

74. *LANIUS LEUCONOTUS* C. L. Brehm.

L. leuconotus was common at Suakin and Erkowit in March 1906. It was not noticed in the Bahr-el-Ghazal Province.

75. *LANIUS NUBICUS* Licht.

The same remarks apply to this species as to the last.

76. *LANIUS PARADOXUS* Brehm.

- a. ♀. Gardein, 17. 1. 07.
 b. ♂. Moyen, 2. 4. 07.
 c. ♂. Ayûm, 27. 2. 07.

Brehm's Woodchat-Shrike was very common all along our route in the Bahr-el-Ghazal country, wherever it was not thick forest.

77. *LANIUS ISABELLINUS* Hemp. & Ehr.

- a. ♂? Kenisa, Feb. 06.
 b. ♂. Khartoum, 30. 10. 07.
 c. ♂. " "

I found the Isabelline Shrike common between Suakin and Erkowit in March and April 1906. M. de Vilmorin gave me the specimen from Kenisa (Upper Nile). I saw it several times in Khartoum in October and November, 1907.

78. *NILAUS AFER* (Lath.).

- a. ♂. Chak Chak, 28. 2. 07.
 b. ♀. Moyen, 22. 1. 07.

Met with at intervals on our Bahr-el-Ghazal journey, but not plentifully.

79. *DRYOSCOPIUS MALZACII* (Heugl.).

- a. ♂. Near Chak Chak, 7. 3. 07.
 b. ♀. " " 12. 2. 07.
 c. ♂ juv. " " 15. 2. 07.

This Wood-Shrike was not uncommon in the forests near Chak Chak. It moved quietly about the branches searching for insects, and reminded me strongly of an old acquaintance, *Tephrodornis pondicerianus*.

80. *LANIARIUS ÆTHIOPICUS* (Gm.).

The Ethiopian Bush-Shrike was common from Ayûm to Wau, and on to Chak Chak.

81. *LANIARIUS CATHAROXANTHUS* (Neum.).

- a. ♂. Kuanga's, 23. 3. 07.
 b. ♂. Wau, 23. 1. 07.
 c. ♀. Chak Chak, 21. 2. 07.

This Grey-headed Bush-Shrike was frequently met with

in pairs, between Wau and Chak Chak, but was much scarcer than *L. erythrogaster*.

82. *LANIARIUS SULPHUREIPECTUS* (Less.).

a. ♂ juv. Bringi's, 1. 2. 07.

I only met with this Bush-Shrike three times, once at Bringi's and twice near Chak Chak. It had a loud whistle of four notes. My specimen is in the first plumage and has the lower surface uniform yellow, with no trace of orange.

83. *LANIARIUS ERYTHROGASTER* Cretzschm.

a. ♀. Chak Chak, 14. 2. 07.

The Scarlet-breasted Bush-Shrike was a common bird wherever we travelled in the Bahr-el-Ghazal country.

Marching south from Suakin in 1905 I did not see it until I reached the cotton-soil country just south of Jebel Maman. From there to the Blue Nile it was met with wherever there was bush.

84. *TELEPHONUS BLANFORDI* Sharpe.

a. ♂. Bor, Upper Nile, Jan. 06.

b. ♀. Pongo River, 3. 2. 07.

This Bush-Shrike was common between Wau and Chak Chak. The specimen from Bor was obtained for me by M. de Vilmorin.

85. *TELEPHONUS MINOR* Reichen.

a. ♀. Bor, Upper Nile, 1905.

Kindly sent to me by Mr. Middleton.

86. *RHODOPHONEUS CRUENTUS* (Hempr. & Ehr.).

a. ♀. Khor Dahand, 22. 3. 06.

b. ♂. „ „

c. ♀. Erkowit, 29. 3. 06.

This beautiful Bush-Shrike was common on the plain south of Suakin and rather less so on the Erkowit plateau. Its habits are something between those of *Telephonus* and *Argya*, and like the latter it associates in small parties. This, the extreme eastern side of the country, is the only locality in which I have met with it, but Capt. H. N. Dunn, R.A.M.C., procured it at some wells in Western Kordofan.

87. *ARGYA ACACIÆ* (Licht.).

a. ♀. Khor Dahand, Suakin, 22. 3. 06.

Lichtenstein's Desert-Babbler is common in the scrub along the plain between the hills and the sea south of Suakin. It does not ascend the hills at all, so far as my observation goes.

88. *CRATEROPUS PLEBEIUS* (Rüpp.).

a. ♂. Buval, 28. 1. 07.

These Babbling-Thrushes were common between Wau and Chak Chak. They were as noisy and excitable as most birds of their genus. I caught and released a newly fledged bird at the Khor Gitti on Jan. 30th.

89. *PYCNONOTUS TRICOLOR MINOR* Heugl.

a. ♂. Bor, Feb. 1906.

b. ♂. Bahr-el-Ghazal River, 12. 1. 07.

c. ♀. " " "

This Bulbul was common along the Bahr-el-Ghazal River and from Meshra to Chak Chak. I am not clear as to the point where it replaces *P. arsinœ* on the White Nile. I am indebted for the specimen from Bor to M. de Vilmorin.

90. *EREMOMELA ELEGANS* (Heugl.).

a. ♀. Chak Chak, 15. 2. 07.

b. ♂. Dug Dug, 19. 1. 07.

These daintily-coloured little Warblers were common both among scattered trees in the open country between Meshra and Wau and in the forests between Wau and Chak Chak.

91. *CAMAROPTERA BREVICAUDATA* (Rüpp.).

Common in the Bahr-el-Ghazal Province between Ayûm and Chak Chak.

92. *SYLVIELLA BRACHYURA* Lafr.

a. ♂. Gameiza, 8. 4. 07.

This little bird was common in the trees on the open alluvial plain inland from Meshra, but I never saw it after reaching the wooded ironstone country.

93 *CISTICOLA STRANGII* (Fraser).

a. ♂. Khor Kobshum, 8. 3. 07.

The only specimen identified.

94. *CISTICOLA RUFA* (Fraser).

a. ♂. Near Chak Chak, 4. 3. 07.

Very abundant in the grassy khors south of Chak Chak.

95. *CISTICOLA RUFICEPS* (Rüpp.).

a. ♂. Chak Chak, 20. 2. 07.

b. ♀. Fashoda, 9. 1. 07.

The Rufous-headed Grass-Warbler was common in suitable localities from Meshra to Chak Chak.

The closed tails of these two specimens have a very different appearance from beneath. In the male the black subterminal bars on the lower surface of the rectrices are very distinct; in the female they only shew through indistinctly on the under surface and are overlapped by the white tips of the next pair of feathers, so that the closed tail appears uniformly whitish below.

96. *CISTICOLA MARGINALIS* (Heugl.).

a. ♂. Chak Chak, 27. 2. 07.

b. ♀. Fashoda, 9. 1. 07.

These Warblers were, as usual, abundant in the herbage along the river-bank at Fashoda, when I landed there in January. I met with them again at Meshra-el-Rek and on the Chell River.

Mr. G. B. Middleton has sent me a skin of this bird from Bor, Upper Nile.

97. *CISTICOLA WELLSI* Grant.

a. ♀. Pongo River, 23. 2. 07. (Type.)

Obtained at Bedari's Village. Only one individual noticed. Apparently a bush-frequenting species, and not a grass-bird. (See Grant, Bull. B. O. C. xxi. p. 17.)

98. *CISTICOLA BUTLERI* Grant.

a. ♂? Chak Chak, 17. 2. 07. (Type.)

Described by Mr. Grant from the single specimen that I

obtained at Chak Chak. It was creeping about among thick thorn-bushes, and was the only one met with. (See Grant, Bull. B. O. C. xxi. p. 17.)

99. *CISTICOLA CINERASCENS* (Hengl.).

a. Doleiba, 19. 1. 07.

My specimen was picked up dead on a path running through high grass.

100. *CISTICOLA FERRUGINEA* Hengl.

a. ♀. Chak Chak, 23. 2. 07.

b. ♂. Moyen, 10. 2. 07.

These beautiful little Warblers are very plentiful in the open forest and bush on the ironstone country in the Bahr-el-Ghazal. I noticed them directly we reached the ironstone at Ayûm, and thence all along the road to Chak Chak. While hopping about among the upcropping rocks strewn with brown dead leaves, they harmonize with their surroundings wonderfully. They are also very arboreal in their habits, working up high into the trees, but they do not frequent grass much. A better name than *ferruginea* could hardly have been chosen for this species.

101. *MELOCICHLA MENTALIS* (Fraser).

a. ♂. Khor Kobshum, 4. 3. 07.

b. ♂. „ 8. 3. 07.

c. ♂. „ 9. 3. 07.

d. ♂. „ 8. 3. 07.

e. ♀. „ 4. 3. 07.

These large Broad-tailed Warblers were fairly common in patches of high grass in the Khor Kobshum between Chak Chak and Dem Zubeir. They are birds of extremely skulking habits, clinging most tenaciously to the smallest patch of cover when alarmed. I got most of my specimens by burning these patches and taking a flying shot at the birds as they fluttered jerkily towards the next cover.

102. *CERCOTRICHAS PODOBE* (P. L. S. Müll.).

I found the Black Bush-Robin common in the bush near Suakin, near Kassala, and along the Atbara. I never saw it in the Bahr-el-Ghazal Province.

103. *ACROCEPHALUS PHRAGMITIS* (Bechst.).

a. ♂. Khartoum, 28. 9. 07.

I have only seen the Sedge-Warbler a few times in Khartoum. I picked up this specimen under a telegraph-wire, against which it must have flown during the night.

104. *PHYLLOSCOPUS RUFUS* (Bechst.).

a. ♂ juv. Khartoum, 28. 10. 07.

b. ♂. „ 29. 10. 07.

I saw quantities of Chiffchaffs at Gameiza in the Bahr-el-Ghazal Province on April 8th, 1907, and shot one for identification.

105. *PHYLLOSCOPUS TROCHILUS* (Linn.).

a. ♂. Khartoum, 30. 10. 07.

106. *PHYLLOSCOPUS BONELLII* (Vieill.).

a. ♀. Khartoum, 2. 10. 07.

I think that there were a good many Bonelli's Warblers about in Khartoum at this date, among the Chiffchaffs.

107. *SYLVIA HORTENSIS* Linn.

a. ♂. Khartoum, 2. 10. 07.

I saw the Garden-Warbler in Khartoum several times on and shortly after this date.

108. *SYLVIA MOMUS* (Hemp. & Ehr.).

a. ♂. Erkowit, 25. 3. 06.

I often saw this species on the Erkowit plateau in March and April, 1906.

109. *SYLVIA CURRUCA* (Linn.).

a. ♀. Erkowit, 25. 3. 06.

b. ♂. Khartoum, 2. 11. 07.

c. ♂. „ 15. 11. 07.

The Lesser Whitethroat was very common on the Erkowit plateau in March and April 1906.

110. *AËDON GALACTODES* (Temm.).

a. ♀. Erkowit, 24. 3. 06.

Common round Suakin in April and May and up to the

top of Erkowit Hill. I saw it occasionally between Wau and Chak Chak during the same months in 1907, but it was scarce in that district.

111. *ERYTHROPYGIA RUFICAUDA* Sharpe.

a. ♀. Between Chak Chak and Dem Zubeir, 5. 3. 07.

This was the only specimen of this pretty Warbler that I saw. In habits and carriage it resembled a small *Aëdon*.

112. *CICHLADUSA GUTTATA* (Heugl.).

a. ♂. Gardein, 18. 1. 07.

The specimen shot at Gardein was hopping about in a thick "Heglik" thorn-tree and singing loudly. I also saw the bird once between Chak Chak and Dem Zubeir, and again at Gardein on my return journey in April.

113. *COSSYPHA HEUGLINI* Hartl.

a. ♂. Khor Gitti, 29. 1. 07.

Heuglin's Chat-Robin was fairly plentiful at the Khor Gitti, keeping to the cover of the dense bushes which overhung the damp mud along the edge of the stream. It was shy and difficult to shoot. I did not see it anywhere else, but Best got a specimen on a khor between Chak Chak and Dem Zubeir.

114. *COSSYPHA VERTICALIS* Hartl.

a. ♂. Roseires, Blue Nile, May 1905.

I am indebted to Mr. G. B. Middleton for my only specimen of this bird, which I have not myself met with.

115. *PRATINCOLA RUBETRA* (Linn.).

a. ♂ juv. Khartoum, 30. 9. 07.

b. ♂ juv. „ 4. 11. 07.

I saw the Whinchat five or six times near Khartoum in the winter of 1907.

116. *RUTICILLA PHENICURUS* (Linn.).

a. ♂. Khartoum, 7. 10. 07.

b. ♂. „ 23. 10. 07.

c. ♂. „ 1. 11. 07.

d. ♂. „ 2. 11. 07.

e. ♀. Chak Chak, 7. 3. 07.

Redstarts were common on Erkowit in March and April,

1906. They were very abundant everywhere in the Bahr-el-Ghazal Province, scores being seen daily between January 14th and April 12th. Great numbers seem to winter in that part of the country.

117. *LUSCINIA LUSCINIA* (Linn.).

a. ♀. Bahr-el-Ghazal River, 12. 1. 07.

A single bird, shot at a place where the steamer stopped for wood, was the only Nightingale seen during our journey in the Bahr-el-Ghazal country.

118. *LUSCINIA GOLZI* (Cab.).

a. ♂. Khartoum, 28. 9. 07.

b. ♀. „ 23. 10. 07.

Numbers of Persian Nightingales arrived in Khartoum in September 1906 and September 1907, but, as usual, all seemed to have moved on by the end of October. I think that the main body of them go much further south. I was interested to ascertain whether I should find them settled down for the winter in the Bahr-el-Ghazal Province, but I only saw one Nightingale during that trip, which proved to be *L. luscinia*.

119. *CYANECULA SUECICA* (Linn.).

a. ♂. Khartoum, 5. 11. 07.

Khartoum does not seem to lie in the Bluethroat's regular line of migration. I have, I think, only noticed the bird there twice.

120. *TURDUS MUSICUS* Linn.

I saw a single Song-Thrush in the Public Gardens at Khartoum on Dec. 17th, 1907. It allowed me to approach and inspect it closely, and I did not think it necessary to shoot it. I have never seen one in the Soudan before, and imagine that its occurrence so far south is exceptional.

120 a. *TURDUS PELIOS* Bp.

a. ♂. Wau, 25. 1. 07.

b. ♂. Chak Chak, 11. 2. 07.

The Ethiopian Thrush was tolerably common between Wau and Chak Chak.

121. *MONTICOLA SAXATILIS* (Linn.).

- a. ♂. Near Chak Chak, 8. 3. 07.
 b. ♀ juv. Near Chak Chak, 12. 2. 07.
 c. ♂ juv. Khartoum, 1. 10. 07.

Only met with twice on our Bahr-el-Ghazal journey, in clearings in the forest; but the country is not well suited to its habits. The male was nearly in full plumage, the female immature.

122. *SAXICOLA GENANTHE* (Linn.).

- a. ♂. Mayîk, 15. 1. 07.
 b. ♂. Gardcin, 18. 1. 07.
 c. ♂. Khartoum, 13. 11. 07.
 d. ♂. „ 14. 11. 07. (*d.* The large form *S. æ. leucorrhœa.*)
 e. ♂. „ 3. 11. 07.
 f. ♂. „ „
 g. ♀. „ 31. 10. 07.
 h. ♂. „ 29. 10. 07.
 i. ♂. „ 31. 10. 07.

In the Bahr-el-Ghazal I found the Common Wheatear abundant everywhere except in thick forest from Meshra to Chak Chak. The bird shot at Mayîk was in very worn and grey plumage, and very white on the under surface.

123. *SAXICOLA HEUGLINI* Finsch & Hartl.

- a. ♂. Mayîk, 15. 1. 07.

This dark-coloured Wheatear was common on the plain between Meshra and Ayûm, but not noticed anywhere else. The birds were generally in pairs and had a habit of hovering in the air somewhat like Bush-Larks.

124. *SAXICOLA MELANOLEUCA* (Güld.).

- a. ♂. Khartoum, 2. 10. 07.

Noticed twice at Khartoum in October 1907. This is the Eastern Black-throated Chat (*Saxicola melanoleuca typica*), with the entire throat from chin to breast black.

125. *SAXICOLA PLESCHANKA* (Lepech.).

- a. ♂. Khartoum, 31. 10. 07.
 b. ♀. „ 12. 11. 07.
 c. ♂. „ 31. 10. 07.
 d. ♀. „ 1. 11. 07.
 e. ♀. „ 29. 10. 07.

I saw this Wheatear perhaps a dozen times in Khartoum in October and November, 1907.

126. *SAXICOLA ISABELLINA* Cretzschm.

- a. ♂. Khartoum, 3. 11. 07.
 b. ♂. „ 11. 11. 07.

The Isabelline Wheatear arrived at Khartoum in considerable numbers during the first few days of November 1907.

127. *SAXICOLA DESERTI* (Temm.).

- a. ♂. Khartoum, 2. 11. 07.
 b. ♂. „ 19. 11. 07.
 c. ♂. „ 2. 11. 07.
 d. ♂ juv. „ 13. 11. 07.
 e. ♂ juv. „ „

There was a noticeable immigration of Desert Wheatears at Khartoum in November 1907.

128. *SAXICOLA LEUCOPYGIA* Brehm.

- a. ♂ juv. Khor Ashat, April 1906.

The southward range of this Chat seems to terminate between the 18th and 19th degrees N. of the Equator. I found it common in April 1906 in the ravines in the barren Gamilab Hills south of Erkowit; and a friend, Mr. W. R. G. Bond, tells me that it is common on the Nile, south of Merowe, where he saw a pair building on January 18th, 1906.

129. *MYRMECOCICHLA LEIPURA* (Hempr. & Ehr.).

- a. ♂. Erkowit, 27. 3. 07.

Common in April and May on the Erkowit plateau. (See note on *Bradyornis pumilus* Sharpe.)

130. MELÆNORNIS EDOLIOIDES (Swains.).

a. ♂. Chak Chak, 8. 3. 07.

b. ♂. Wau, 24. 1. 07.

A common bird between Wau and Chak Chak.

131. BRADYORNIS PALLIDUS (V. Müll.).

a. ♂. Pongo River, 6. 2. 07.

b. ♂. Chak Chak, 27. 2. 07.

c. ♀. Near Chak Chak, 17. 3. 07.

Common in forest between Wau and Chak Chak.

132. BRADYORNIS PUMILUS Sharpe.

a. ♂. Erkowit, 26. 3. 06.

This bird was common on the Erkowit plateau in March and April, frequenting the Euphorbias in company with *Myrmecocichla leipura*. Small parties of six or seven individuals generally contained both species. The two birds are extremely similar in appearance, except for the blackish upper tail-coverts of *M. leipura*. I admit that at first I took them for the same species.

133. MUSCICAPA GRISOLA Linn.

134. MUSCICAPA ATRICAPILLA Linn.

When I returned to Khartoum from leave on Sept. 25th, 1907, I found that both Spotted and Pied Flycatchers had already arrived, the former in large, and the latter in small numbers. As usual, they disappeared again after a fortnight or so, and by the end of October the whole neighbourhood might have been searched without the slightest chance of seeing a specimen of either.

135. HYLLOTA FLAVIGASTRA Swains.

a. ♂. Pongo River, 22. 3. 07.

b. ♂ juv. Moyen, 21. 1. 07.

c. ♀. Khor Gitti, 31. 1. 07.

Fairly common in the ironstone forest-country. Generally found in small parties, associating with mixed assemblages of small birds engaged in searching the foliage for insects.

136. BATIS ORIENTALIS Heugl.

a. ♀. Chak Chak, 15. 2. 07.

I saw this little Flycatcher several times on Erkowit in

March 1906. It was common everywhere in the part of the Bahr-el-Ghazal Province that I visited.

137. *ELMINIA TERESITA* Antin.

a. ♂. Chak Chak, Feb. 1907. (Skin lost.)

I came across this beautiful little Flycatcher once only, in a large tree overhanging the river at Chak Chak. It was continually in motion, spreading its wings and tail as restlessly as a *Rhipidura*. The bird was rather badly injured by my shot, and I spent a long time in cleansing its delicate plumage and making a very perfect skin of it; but on unpacking my collection at Khartoum this one specimen proved to be unaccountably missing.

138. *TERPSIPHONE CRISTATA* (Gm.).

a. ♂ ad. Near Wau, 25. 4. 07.

b. ♂ juv. Wau, 24. 1. 07.

I met with this Paradise Flycatcher only near Wau and at the Khor Gitti. It was rather scarce, and I only saw adult males two or three times.

139. *EMPIDORNIS SEMIPARTITUS* (Rüpp.).

a. ♀. Amien, 15. 1. 07.

b. ♂. Gardein, 17. 1. 07.

c. ♂. " "

d. ♀. " 7. 4. 07.

e. ♂. " "

This Grey-and-Rufous Flycatcher seemed very local. It was numerous among the trees at Gardein, but I only saw it at one other place—Amien,—a single individual. It is a quiet little bird and feeds more by watching the ground for insects and dropping down from its perch to catch them than by pursuing them in the air.

140. *COTILE RIPARIA* (Linn.).

141. *COTILE MINOR* Cab.

a. ♂. Khartoum, 25. 10. 07.

b. ♀. " "

142. COTILE SHELLEYI Sharpe.

a. ♀. Khartoum, 6. 11. 07.

Both *C. riparia* and *C. shelleyi* are abundant at Khartoum in the winter, and large flocks of either or both species may often be seen hawking over the river or over the crops near it. *C. minor*, though always present in the winter, is much scarcer. It keeps more exclusively to the river-banks, in which it breeds in the spring, than the other two species, and does not seem to accompany them inland at all. At the margin of the river I have seen all three of these species on the wing together. *C. riparia*, shot between Meshra and Wau in March, was the only Sand-Martin that I met with in the Bahr-el-Ghazal.

143. PTYONOPROGNE OBSOLETA (Cab.).

a. ♀. Erkowit, April 1906.

This little Cliff-Swallow was common at Suakin in March and April, and also up on Erkowit, where it freely entered the houses. My specimen from Suakin appears to be slightly darker than an Assouan bird and to have a bronze or greenish lustre on the wings instead of a purplish one. The difference is slight, but it struck me that the birds looked a little browner and less grey than Egyptian examples when on the wing. Mr. Grant, however, puts my specimen down as *C. obsoleta* without comment.

144. HIRUNDO RUSTICA Linn.

Frequently seen in the Bahr-el-Ghazal Province in February and March.

145. HIRUNDO ÆTHIOPICA Blanf.

I noticed the Abyssinian Swallow frequenting some of the mud-built rest-houses between Meshra and Wau in March and April.

146. HIRUNDO SMITHI Leach.

a. ♂. Chak Chak, 16. 2. 07.

I noticed the Wire-tailed Swallow in pairs on the Jur River at Wau, and on the Chell River at Chak Chak, where they were nesting among the rocks in March.

147. *HIRUNDO DOMICELLA* Finsch & Hartl.

a. ♂. }
 b. ♀. } Bahr-el-Ghazal River, 12. 1. 07.

This Swallow was abundant over the Bahr-el-Ghazal River and wherever there was water between Meshra-el-Rck and Chak Chak.

148. *CYPSELUS APUS* (Linn.) ?

Swifts, which looked like *C. apus*, were several times seen flying over the open country between Meshra and Wau in February, but they were always too high in the air for me to obtain a specimen.

149. *CYPSELUS AFFINIS* Hardw.

This White-rumped Swift was plentiful among the gorges in the hills of the Gamilab country south of Suakin in April and May, 1906.

150. *TACHORNIS PARVA* (Licht.).

This little Swift was common in the Bahr-el-Ghazal country wherever there were Doleib palms.

151. *CAPRIMULGUS EXIMIUS* Temm.

On April 1st, 1905, I bought two small half-fledged young of this Nightjar from an Arab urchin who had found them near Khartoum. I never imagined that there was any likelihood of their living, but, being anxious to give them a chance, fed them at meal-times by cramming them with bits of fish, egg, omelette, mince, &c. To my great surprise they thrived, and by the 16th could fly fairly well. That night, however, I found one of them dead. On the 18th I released the survivor in my garden at dusk. I flushed it once the next day, but never saw it again. I fear that it must have died through not being able to catch food for itself.

152. *CAPRIMULGUS ÆGYPTIUS* (Licht.).

a. ♂. Khartoum, 18. 10. 07.

153. *MACRODIPTERYX LONGIPENNIS* Shaw.

a. ♀. Gardein, 6. 4. 07.

b. ♂. Khor Kobshum, 5. 3. 07.

c. ♂. Gardein, 6. 4. 07.

d. ♂. Kuanga's, 23. 3. 07.

The Standard-winged Nightjar is locally migratory in the Soudan, its movements being probably dependent on the supply of water, near which it is generally found. After leaving Meshra-el-Rek on January 15th, I did not see a single Standard-wing until March 5th (south of Chak Chak). On my return journey after that date I met with it almost every day, and along the road to Meshra it was quite numerous. It was especially plentiful round Gardein, where on April 4th, 5th, and 6th there were literally dozens on the wing in the dusk of the evening around a few pools of water. On these three evenings I sat by the pools and watched the beautiful birds gliding and wheeling round me within a few yards. I think that this "gathering of the Standards" was one of the most remarkable sights of bird-life that I have ever seen.

Though I repeatedly came on them at rest in the daytime, I have never yet seen a bird sitting with the "standards" erect.

A *female* shot at Gardein on April 5th had the ninth primaries noticeably narrower than the others, and on these feathers the chequer markings were blurred and indistinct. Other females examined shewed no peculiarity in the feathers to correspond with the "standards" of the male.

154. SCOTORNIS CLIMACURUS (Vieill.).

The Long-tailed Nightjar was abundant on the Bahr-el-Ghazal River and from Meshra to Chak Chak. I came across its eggs several times in February and March, once or twice on quite open ground, where the sitting bird was exposed to the full heat of the sun.

155. EURYSTOMUS AFER (Lath.).

a. ♂. Khor Gitti, 24. 3. 07.

The only example of this species that I saw was on my Bahr-el-Ghazal trip.

156. *CORACIAS NEVIUS* Dand.

a. ♂. Pongo River, 4. 2. 07.

I met with these handsome Rollers, either singly or in pairs, on some eight or nine occasions, at the village of Sheikh Zaid, on the Pongo, and between that river and Chak Chak. They were extremely wary and watchful, and, in spite of repeated attempts, I never managed to approach within range of any but the one that I shot.

157. *CORACIAS GARRULUS* Linn.

a. ♂. Khartoum, 23. 10. 07.

The Common Roller arrived in Khartoum in larger numbers than usual this year (1907), and during October a dozen of them might often be seen together.

158. *CORACIAS ABYSSINICUS* Bodd.

a. ♀. Khartoum, 20. 10. 07.

b. ♂. „ 24. 10. 07.

The Abyssinian Roller was common all along the White Nile up the Bahr-el-Ghazal, and from Meshra to Chak Chak.

159. *DICROCERCUS FURCATUS* (Stanl.).

a. ♀. Pongo River, 4. 2. 07.

b. ♂. „ „

c. ♀. „ 3. 2. 07.

I only met with these pretty Swallow-tailed Bee-eaters a few times near the Pongo River, and again at Ofio's Village near Chak Chak. They were generally in pairs and kept to the tops of high trees in the forest. I never saw them hawking over the rivers as most Bee-eaters are so fond of doing.

160. *MEROPS FRENATUS* (Hartl.).

a. ♀. Pongo River, 4. 2. 07.

b. ♀. Chak Chak, 24. 2. 07.

These gaudy Bee-eaters are great lovers of water. They were extraordinarily plentiful on the Jur, Pongo, and Chell Rivers.

161. *MEROPS PUSILLUS* P. L. S. Müll.

I saw this little Bee-eater at intervals the whole way from Khartoum to Chak Chak on my Bahr-el-Ghazal trip.

162. *MEROPS VIRIDIS* Linn.

The Green Bee-eater was met with occasionally between Wau and Chak Chak.

163. *MEROPS NUBICUS* Gm.

The Red Bee-eater was very abundant as far as I travelled in the Bahr-el-Ghazal.

164. *UPUVA EPOPS* Linn.

Hoopoes were very numerous on the Erkowit plateau during the last ten days of March 1906. A dozen or twenty of them would often be in sight at the same time. I also saw them in Suakin. In the Bahr-el-Ghazal country they were scarce along the route which I followed; I only saw about half a dozen in all.

165. *IRRISOR ERYTHORHYNCHUS* (Lath.).

a. ♂. }
b. ♂ juv. } Wau, 25. 1. 07.

These Red-billed Wood-Hoopoes were frequently seen along our route in the Bahr-el-Ghazal Province, usually near clearings or in the more open parts of the forest. I also saw them in some of the "khors," where there were palms, between Suakin and Kassala, and located an inaccessible nest in May 1906. It was in a neat round hole in a rotten palm, some twenty-five feet from the ground.

166. *SCOPELUS NOTATUS* Salvin.

This Wood-Hoopoe was scarce in the country we traversed in the Bahr-el-Ghazal Province. I only noted it at Doleiba and Bîr-el-Girûd.

167. *BUCORVUS ABYSSINICUS* (Bodd.).

The Abyssinian Ground Hornbill was frequently met with in small parties of four or five, at various points between Meshra and Chak Chak.

168. *LOPHOCEROS NASUTUS* (Linn.).

169. *LOPHOCEROS ERYTHORRHYNCHUS* (Temm.).

Both these small Hornbills were frequently noticed on our march in the Bahr-el-Ghazal.

170. *CERYLE RUDIS* (Linn.).

The Pied Kingfisher was common on the Bahr-el-Ghazal, Jur, Pongo, and Chell Rivers.

171. *CERYLE MAXIMA* (Pall.).

The Great Spotted Kingfisher was not uncommon on the Jur, Pongo, and Chell Rivers, and was also seen at the Khor Gitti.

172. *CORYTHORNIS CYANOSTIGMA* (Rüpp.).

a. ♂. Chak Chak, 21. 2. 07.

The little Malachite-crested Kingfisher was common at all the rivers and khors which held water in the part of the Bahr-el-Ghazal country through which we passed.

I did not see *Ispidina picta* (Bodd.) on this journey.

173. *HALCYON SEMICÆRULEUS* (Forskål).

Occasionally met with all along our line of march in the Bahr-el-Ghazal, but not plentifully.

174. *HALCYON CHELICUTENSIS* (Stanl.).

a. ♂. Chak Chak, 17. 2. 07.

Noted at intervals from Meshra-el-Rek to Chak Chak, but not commonly.

175. *COLIUS MACRURUS* (Linn.).

On October 13th, 1905, and for a few days afterwards, I saw a pied example of this Coly, with the back, wings, and tail mostly white, among a flock in Khartoum. Blue-naped Colies were plentiful in the gardens at Suakin in April 1906. They were constantly met with along our line of march in the Bahr-el-Ghazal Province. These Colies are at present quite abundant in Khartoum, their numbers having greatly increased with the growth of trees and gardens.

In captivity they are most charming birds. Their attitudes are extraordinary and they often suspend themselves

under their perches like *Loriculi*, always crowding together into as compact a bunch as possible. One characteristic position is to let themselves down behind the twig on which they are perched until only their bills and eyes appear over the top of it. A row of them will maintain this position for an hour at a time—looking precisely as if they were drawing themselves up to the chin on a horizontal bar.

176. *TURACUS LEUCOLOPHUS* Heugl.

a. ♀. Chak Chak, 16. 2. 07.

b. ? Pongo River, 5. 2. 07.

c. ♂. Khor Gitti, 30. 1. 07.

d. ♀. " "

e. ♂. " 29. 1. 07.

f. ♂. Chak Chak, 16. 2. 07.

We first came across the White-crested Turaco in the forests near the Khor Gitti. From there to Chak Chak it was fairly common.

These beautiful Plantain-eaters are shy birds, keeping to the higher forest and feeding on berries. Trees overgrown with parasitic creepers form their favourite shelter. I generally saw them in pairs or parties of four or five, but once or twice I found as many as a dozen gathered together on some tree in fruit. They have a variety of croaking cries, but are not nearly such noisy birds as the *Schizorhis*. Sometimes, in the shade of the forest, their wings appear of quite a bronzed chestnut colour, and they might in flight almost be taken at a distance for some white-headed species of *Centropus*, but in the full sunlight the vivid crimson of the wings shews most conspicuously. The Golo natives called the bird "Kombo."

177. *SCHIZORHIS ZONURA* Rüpp.

a ♂. Pongo River, 4. 2. 07.

These noisy and conspicuous Grey Plantain-eaters were abundant from Ayûm to Chak Chak. They are as active as a squirrel in running along branches, and are extraordinarily good runners on the ground. At Dud Majok I noticed a bird which had injured its wing and was sitting in a small tree by itself. The Jur natives who were with me shook it

to the ground, but it dodged three of them for quite a couple of hundred yards before they managed to catch it.

178. *CENTROPUS MONACHUS* (Rüpp.).

a. ♀. Lake No, 9. 2. 06.

I am indebted to M. de Vilmorin for this specimen.

One species of *Centropus* was common in the Bahr-el-Ghazal from Meshra to Chak Chak, but I can find no note of having identified it.

179. *COCCYTES GLANDARIUS* (Linn.).

a. ♂. Erkowit, 25. 3. 06.

b. Dud Majok, 31. 3. 07.

Scarce. Those noted above, and two or three seen near Renk on the White Nile in March 1905, are the only specimens that I have seen in the last three years.

180. *COCCYTES JACOBINUS* (Bodd.).

a. ♀. Bor, Upper Nile, 7. 5. 06.

b. ♀. „ „ „

On October 5th, 1905, Mr. W. G. Percival brought me alive a newly fledged Pied Crested Cuckoo, obtained just north of Khartoum. *Argya acaciæ* (Licht.) would, in this locality, seem the most probable foster-parent. For the two specimens from Bor I am indebted to Mr. G. B. Middleton.

181. *CUCULUS CANORUS* Linn.

I saw two or three Common Cuckoos at Amien in the Bahr-el-Ghazal on April 10th. They kept uttering the first note only of their familiar call.

182. *CHRYSOCOCCYX KLAASI* (Steph.).

a. ♀. Khor Gitti, 31. 1. 07.

b. ♀ juv. „ „

The only examples that I noticed.

183. *INDICATOR SPARRMANI* Stephen.

a. ♂. Pongo River, 5. 2. 07.

b. ♀. „ „

c. ♂. Near Wau, 28. 1. 07.

d. ♀. Pongo River, 6. 2. 07.

This Honey-Guide was a common bird along my route in

the Bahr-el-Ghazal Province, except on the open plains towards Meshra-el-Rek.

184. *ERYTHROBUCCO ROLLETI* (De Filippi).

a. ♂. Chak Chak, 9. 2. 07.

b. ♂. „ 18. 2. 07.

c. ♀. Dud Majok, 28. 3. 07.

d. ♂. Buval, 28. 1. 07.

e. ♂. Chak Chak, 19. 2. 07.

f. ♀. Pongo River, 19. 3. 07.

These handsome and conspicuous Barbets were tolerably common all along our line of march in the Bahr-el-Ghazal after we had entered the forest-region.

185. *LYBIUS LEUCOCEPHALUS* (De Filippi).

a. ♂. Menyah, 16. 1. 07.

b. ♀. Gardein, 18. 1. 07.

c. ♂ juv. Ayûm, 20. 1. 07.

d. ♂. Gardein, 5. 4. 07.

The White-headed Barbets were fairly common in the open country between Meshra and Wau, feeding on the figs of the "Gameiza" tree. They were also met with at intervals from Wau to Chak Chak, but seemed scarcer in this forest-country. They were usually seen in small parties.

186. *LYBIUS ABYSSINICUS* (Lath.).

a. ♂. Bor, 4. 5. 06.

b. ♀. „ „

Obtained for me by Mr. G. B. Middleton. I have not met with the bird.

187. *LYBIUS VIEILLOTI* Leach.

a. ♀. Chak Chak, 12. 2. 07.

b. ♂. Gardein, 18. 1. 07.

c. ♂. Moyen, 21. 1. 07.

Vieillot's Barbet was fairly common throughout the country visited in the Bahr-el-Ghazal Province.

188. *BARBATULA CHRYSOCOMA* (Temm.).

a. ♂. Makwak, 22. 1. 07.

b. ♂. Chak Chak, 9. 2. 07.

c. ♂. Buval, 28. 1. 07.

These pretty miniature Barbets were common all along our march in the Bahr-el-Ghazal after the ironstone forest-country was entered. They are noisy little birds for their size, constantly uttering a shrill dissyllabic call-note with the sound of a trilled "r" in it. They seemed fond of the society of mixed parties of other small birds, and were often seen fluttering out from a tree to capture insects in the air.

189. *TRACHYPHONUS MARGARITATUS* (Rüpp.).

a. ♂. Erkowit, 24. 3. 06.

b. ♂. " "

At the time of my visit this Barbet was common in the gardens at Suakin, and on Erkowit, where it frequented the Euphorbias. I did not see it at all in the Bahr-el-Ghazal.

190. *TRACHYPHONUS ARNAUDI* (Des Murs).

a. ♂. Bor, Upper Nile, 6. 5. 06.

b. ♀ " " 10. 5. 06.

My two specimens were given to me by Mr. G. B. Middleton. I also noticed the species in a small collection of birds made at Bor by M. de Vilmorin.

191. *IYNX TORQUILLA* Linn.

a. ♂. Renk, White Nile, 7. 1. 07.

b. ♂. Chak Chak, 23. 2. 07.

c. ♂. Khartoum, 11. 10. 07.

I only met with the Wryneck three or four times on the Bahr-el-Ghazal journey. I saw it at Khartoum on September 26th, 1907, and several times during October.

192. *CAMPOTHERA SHOENSIS* (Rüpp.).

a. ♀? Khor Gitti, 29. 1. 07.

This Woodpecker seemed rare. I saw it three times only—at the Khor Gitti, at Kuanga's, and on the Pongo.

193. *CAMPOTHERA NUBICA* (Gm.).

a. ♀. Chak Chak, 20. 2. 07.

Fairly common between Chak Chak and Wau.

194. *MESOPICUS PŒOCEPHALUS* (Swains.).

a. ♂. Gardein, 17. 1. 07.

b. ♂. Pongo River, 5. 2. 07.

c. ♀. Chak Chak, 22. 2. 07.

We first met with these little Red-rumped Green Woodpeckers at Gardein, and thence to Chak Chak and Dem Zubeir they were common wherever the forest was of an open nature. They were usually in parties of seven or eight, but pairs were occasionally met with.

195. *IYNGIPICUS OBSOLETUS* (Wagl.).

a. ♂. Khor Gitti, 31. 1. 07.

b. ♀. Chak Chak, 15. 2. 07.

I shot a female of this Pigmy Woodpecker on the summit of Erkowit on March 3rd, 1906. It was common all through the country traversed in the Bahr-el-Ghazal Province.

196. *VINAGO CALVA* (Temm. & Knip).

a. ♂. Mayîk, 15. 1. 07.

b. ♂. „ 9. 4. 06.

These Fruit-Pigeons were abundant between Meshra-el-Rek and Chak Chak, collected in flocks to feed on the fruit of a large *Ficus* locally known as the "Gameiza." They have a clear modulated whistling note, like that of *Osmotreron*.

This is the species mentioned in my previous paper as seen but not shot, and doubtfully listed as *V. wualia* (Gm.) ('Ibis,' 1905, p. 358).

197. *COLUMBA GUINEA* Linn.

a. ♀. Gardein, 17. 1. 07.

The Guinea Pigeon was, as usual on the White Nile, first met with among the "Doleib" palms at Tewfikia, and in the Bahr-el-Ghazal country we found it abundant wherever these palms occurred. I occasionally saw sixty or seventy individuals in a flock.

198. *TURTUR DECIPIENS* Finseh & Hartl.

199. *TURTUR ROSEIGRISEUS* (Sundev.).

a. ♀. Khor Gitti, 24. 3. 07.

Both these Doves were common, the latter especially so, everywhere we went in the Bahr-el-Ghazal Province. The native boys trapped them a good deal with springes.

200. *CHALCOPELIA AFRA* (Linn.).

201. *CENA CAPENSIS* (Linn.).

Both these Doves were met with from Meshra to Chak Chak, but, though common, were much less abundant than the two preceding species.

202. *PŒOCEPHALUS MEYERI* (Rüpp.).

a. ♂. Chak Chak, 11. 2. 07.

Meyer's Parrot was common from Ayûm to Chak Chak.

203. *PALÆORNIS DOCILIS* Vieill.

Also common from Ayûm to Chak Chak.

204. *STRIX FLAMMEA* Linn.

I did not see any Barn-Owls in the Bahr-el-Ghazal Province, but I heard their screech frequently at night.

205. *ASIO CAPENSIS* Smith.

In January 1907 I again saw numbers of these Owls in the papyrus "sudd" fringing the Bahr-el-Ghazal River. At night the sparks which the steamer was throwing up seemed to excite their curiosity, and several times an Owl swooped right through the golden shower issuing from the funnel.

206. *GLAUCIDIUM PERLATUM* (Vieill.).

a. ♀? Wau, 23. 1. 07.

The Pearl-spotted Owlet was very common in the Bahr-el-Ghazal forests. We heard it in all directions every evening at dusk.

207. *SCOPS LEUCOTIS* (Temm.).

a. ♀. Mogatta, R. Atbara, May 1906.

b. ♂. Khartoum (aviary bird, died 10. 12. 06).

I saw several individuals of this handsome Scops Owl at

Mogatta on the Atbara in May 1906. The specimen *b* was caught in Khartoum during the same month, and lived in captivity till October, when it died quite suddenly in beautiful condition. It was a very friendly little Owl, welcoming anyone who noticed it with queer little wheezy whistlings and chuckles.

208. *SCOPS GIU* (Scop.).

a. ♀. Road to Chak Chak, 10. 2. 07.

The common Scops Owl was plentiful in Khartoum during the winter of 1906, and I noted it constantly in October and November. On the evening of November 3rd I saw three sitting close together on a tree in my garden. The specimen shot in the Bahr-el-Ghazal country was the only one that I saw there.

209. *BUBO CINERASCENS* Guér.

a. ♂. Chak Chak, 15. 2. 07.

This Owl was common near the rivers in the Bahr-el-Ghazal country.

210. *FALCO FELDEGGI* Schl.

a. ♂ juv. Khartoum, 4. 11. 07.

One or two individuals can always be seen at Khartoum in the winter.

211. *FALCO TANYPTERUS* Schl.

a. ♀. Khartoum, 28. 10. 07.

A comparatively rare bird at Khartoum. I saw it a few times in the Bahr-el-Ghazal country.

212. *FALCO RUFICOLLIS* Swains.

a. ♂. Tewfikia, 10. 1. 07.

b. ♀. Khartoum, 4. 11. 07.

The dashing little Red-headed Merlin was common all along our line of march in the Bahr-el-Ghazal country wherever there were *Borassus* palms. It is curious how fond this bird and *Columba guinea* are of this particular tree. Going up the White Nile, as usual, neither species was met with until we reached *Borassus* palms at Tewfikia, where both are always to be found.

The specimen *b* is the only one that I ever saw at Khartoum.

213. *CERCHNEIS TINNUNCULUS* (Linn.).

a. ♀. Khartoum, 26. 10. 07.

b. ♀. „ 28. 10. 07.

c. ♀. „ 30. 10. 07.

The Common Kestrel was abundant along our route in the Bahr-el-Ghazal Province.

Mr. M. J. Nicoll, to whom I sent the specimens, remarks that they are “much paler above and more heavily barred than either British or Giza (Cairo) Kestrels.”

214. *CERCHNEIS ARDESIACUS* (Bonn. et Vieill.).

a. ♀. Moyen, 21. 1. 07.

I saw this Grey Kestrel some half a dozen times in all in the Bahr-el-Ghazal Province, meeting with it at Moyen, the Khor Gitti, and Chak Chak. At the latter place Best also obtained a specimen on February 23rd.

215. *ELANUS CÆRULEUS* (Desf.).

The Black-shouldered Kite was fairly common on the open plains between Meshra and Wau, and along the Chell River, but was so shy that it was difficult to get within a hundred yards of it. I remember this as a very confiding and unsuspecting Hawk in Ceylon. Best managed to shoot two specimens at a place called Bîr-el-Girûd (the Well of the Baboons).

216. *MILVUS ÆGYPTIUS* (Gm.).

The Egyptian Kite was common throughout the parts of the Bahr-el-Ghazal which we visited.

217. *HALIAËTUS VOCIFER* (Daud.).

The African River-Eagle was common on the Bahr-el-Ghazal, Pongo, and Chell Rivers.

218. *HELOTARSUS ECAUDATUS* (Daud.).

a. ♂. White Nile, 1905.

The beautiful Bateleur Eagle was common in the hills south of Suakin. I noticed that it used to roost in trees in

the sheltered ravines. The natives assured me that it killed a great many Klipspringer fawns.

Throughout our march in the Bahr-el-Ghazal Province we saw numbers every day. I have not noticed it so abundant anywhere else. This Eagle has extremely keen sight, and two were accidentally caught in steel traps set for mammals, though the meat bait had been carefully screened over with thorns to conceal it as far as possible from birds passing above.

A nestling in brown plumage, with the cere and orbital skin olive-green, was brought to me from Kordofan on Jan. 1st, 1907, and is growing into a fine bird. I am now rearing a second nestling, brought in on Dec. 24th, 1907.

219. AQUILA RAPAX (Temm.).

The Tawny Eagle was numerous on the Suakin plain and in the mountains of the district, often visiting our camps after a gazelle or an ibex had been shot, and feeding on the scraps in company with *Neophron percnopterus*. It was frequently seen in the part of the Bahr-el-Ghazal country which we visited. On one occasion I came on a pair making a meal off one of the great cane-rats (*Thryonomys swinderenianus*), the skull of which I secured as a specimen. A few days later Blaine saw a pair attack a small Bustard (*Otis lissotis*) and took it from them in a dying condition.

220. SPIZAËTUS CORONATUS (Linn.).

A splendid Crested Eagle, probably of this species, was seen on a few occasions on the Pongo River, near Chak Chak, and towards Dem Zubeir. It was usually very wary, and I only succeeded in getting a long rifle-shot at one individual, which I missed.

221. LOPHOAËTUS OCCIPITALIS (Daud.).

The Black-crested Eagle, so common along the White Nile and the lower parts of the Bahr-el-Ghazal River, seemed very scarce in the interior of the Bahr-el-Ghazal Province. I only saw it once on my line of march, at Bir-el-Girûd.

222. BUTEO DESERTORUM (Daud.).

a. ♂. Khartoum, 31. 10. 07.

Not uncommon at Khartoum in the winter. I did not see it in the Bahr-el-Ghazal Province.

223. BUTASTUR RUFIPENNIS (Sundev.).

Fairly common between Meshra and Chak Chak.

224. ASTURINULA MONOGRAMMICA (Temm.).

We met with one pair of these Hawks only on our Bahr-el-Ghazal trip, at the Khor Gitti, on March 24th. When I saw them they were circling about high over the forest, and would not descend, so that I had no chance of getting a specimen. Later on in the day, however, Best managed to shoot the female of the same pair. It contained an unbroken egg, ready for exclusion, which he kindly gave to me. The egg is pale blue in colour, without markings, like the egg of a *Melierax*, and measures 41×35 mm. The eggs of *Asturinaula* have not, I believe, been described before.

The female shot was a very beautiful specimen, and was, for its size, the most compactly built and heaviest small Hawk that I have ever handled.

225. MELIERAX POLYZONUS (Rüpp.).

This conspicuous Hawk was common wherever we travelled in the Bahr-el-Ghazal.

226. MELIERAX GABAR (Daud.).

a. ♂. Chak Chak, 25. 2. 07.

M. gabar was frequently seen during our journey from Wau to Chak Chak.

M. niger (Bonn. et Vicill.), which I believe to be a melanistic variety of this species, I saw only twice—once on March 2nd, between Chak Chak and Dem Zubeir, and again on March 22nd at Kuanga's Village.

227. ASTUR SPHENURUS Rüpp.

a. ♂. Wau, 24. 1. 07.

This Sparrow-Hawk was fairly common throughout the country between Wau and Chak Chak.

228. *CIRCUS MACRURUS* (Gm.).

229. *CIRCUS ÆRUGINOSUS* (Linn.).

Both these Harriers were seen along our route in the Bahr-el-Ghazal Province.

230. *SERPENTARIUS SECRETARIUS* (Scop.).

Since writing my previous notes I have met with the Secretary-Bird perhaps eight or nine times in all, at the following localities: between Gedaref and the Atbara, between Renk and Kaka on the White Nile, and in the Bahr-el-Ghazal Province between Chak Chak and Wau and at Dud Mavok.

A nestling was brought to me from the White Nile in December 1907, and I tried to rear it, but the long slender legs never acquired strength, and gradually became so distorted that I had to destroy the bird.

231. *LOPHOGYPS OCCIPITALIS* (Burch.)?

An immature Vulture, caught at Khartoum in 1906, which I now have alive, appears to me to belong to this species.

232. *GYPS RUEPELLI* (Brehm).

Rüppell's Vulture often visited our camps in the Bahr-el-Ghazal country when there was meat about.

233. *PSEUDOGYPS AFRICANUS* (Salvad.).

The African White-backed Vulture was common near Chak Chak, and south towards Dem Zubeir.

234. *NEOPHRON PERCNOPTERUS* (Linn.).

Abundant everywhere from Suakin to Kassala, and fairly common throughout the part of the Bahr-el-Ghazal Province which I traversed.

235. *NEOPHRON MONACHUS* (Temm.).

Much more numerous than the last species.

236. *IBIS ÆTHIOPICA* (Lath.).

237. *GERONTICUS HAGEDASH* (Lath.).

Both Sacred and Hagedash Ibises were common at all the rivers and "khors" which we visited in the Bahr-el-Ghazal Province.

238. *ARDEA PURPUREA* Linn.

239. *ARDEA CINEREA* Linn.

The same may be said of these Herons as of the Ibises.

240. *ARDEA MELANOCEPHALA* Vig. & Childr.

241. *ARDEA GOLIATH* Cretzschm.

These two species were only seen on the larger rivers.

242. *HERODIAS BRACHYRHYNCHA* Brehm.

243. *HERODIAS RALLOIDES* (Scop.).

244. *HERODIAS BUBULCUS* (Aud.).

These three Egrets were common in suitable localities, in the Bahr-el-Ghazal Province.

245. *BUTORIDES ATRICAPILLUS* (Afzel.).

I saw the African Green Bittern on the Jur, Pongo, and Chell Rivers.

246. *BALÆNICEPS REX* Gould.

We saw scores of Whale-headed Storks daily on the lower portion of the Bahr-el-Ghazal River.

247. *SCOPUS UMBRETTA* Gm.

The Hammerhead was common in the vicinity of water from Meshra to Chak Chak.

248. *CICONIA NIGRA* (Linn.).

I came on a party of six Black Storks at a pool in a "khor" between Chak Chak and Dem Zubeir on March 5th. Mr. W. R. G. Bond writes to me that he saw one at Merowe, Dongola Province, on Jan. 18th, 1906.

249. *CICONIA ABDIMII* Licht.

I saw a single Abdim Bey's Stork on the Erkowit plateau on March 23rd, 1906.

I noticed this species constantly on the Meshra-Wau-Chak Chak march from January to April.

250. *MYCTERIA SENEGALENSIS* (Shaw).

Saddle-billed Storks were met with at intervals along the White Nile, on the Bahr-el-Ghazal, and at most of the rivers and "khors" which we crossed between Meshra and Chak

Chak. They were usually seen in pairs or parties of three or four.

On January 9th, 1907, I saw from the steamer a Saddle-billed Stork sitting on a great nest of sticks on the top of a mimosa tree. This was on the E. bank of the White Nile, some miles N. of Tewfikia.

251. *LEPTOPTILUS CRUMENIFER* (Cuv.).

The African Adjutant was common in the part of the Bahr-el-Ghazal Province visited.

252. *ANASTOMUS LAMELLIGERUS* Temm.

Common on the Bahr-el-Ghazal rivers. I saw breeding-colonies of the Open-billed Stork and of the Sacred Ibis on trees growing on rocky islets in the Nile just north of the Shabluka Cataract, in Sept. 1907.

253. *PELECANUS RUFESCENS* Gm.

We passed a fairly large breeding-colony of these Pelicans in a grove of tall "Doleib" palms near Doleiba on January 20th. (The village takes its name from these palms.) If the birds did their fishing in the Jur River they must have had to carry food to their young a distance of forty miles, and I do not know where they could have found a piece of water large enough to supply the colony any nearer.

254. *STERNA ANGLICA* Mont.

a. ♂. Khartoum, 15. 11. 07.

Abundant at Khartoum in the winter.

255. *LARUS RIDIBUNDUS* Linn.

a. ♀. Dueim, White Nile, 10. 1. 06.

This immature example of the Black-headed Gull was kindly given to me by M. de Vilmorin. At the time when he wrote the 'Birds of Egypt,' Capt. Shelley knew of no record of its existence in Nubia. I saw a similar specimen at Dueim on Jan. 4th, 1907, but this Gull is certainly rare on the White Nile.

256. *PLECTROPTERUS RUEPPELLI* Sclat.

After leaving Meshra-el-Rek I only saw the Spur-winged Goose at Amien.

257. *SARCIDIORNIS MELANONOTA* (Penn.).

The Comb-Goose was common at several points between Meshra and Chak Chak.

258. *DENDROCYCNA VIDUATA* (Linn.).

I saw the White-faced Whistling-Teal at a few "khors" between Meshra and Chak Chak, but it was scarce inland in the dry season.

259. *CHENALOPEX ÆGYPTIACUS* (Linn.).

I saw the Egyptian Goose on the Jur and Chell Rivers, but only in small numbers. The lower portion of the White Nile is the great stronghold of the bird in the Soudan.

260. *QUERQUEDULA CIRCIA* (Linn.).

a. ♂. Khartoum, 10. 3. 06.

I shot several drakes of the Gargancy in breeding-plumage about this date, flying northwards at dusk.

261. *FULIGULA NYROCA* (Güldenst.).

a. ♂. Khartoum, 10. 3. 06.

Shot and given to me by Sir John Eardley Wilmot.

262. *FULIGULA CRISTATA* (Leach).

Sir John Eardley Wilmot, flight-shooting with me in the evening, killed three Tufted Ducks at Khartoum on March 10th, 1906.

263. *FULICA ATRA* Linn.

A Coot, caught in Khartoum, was brought to me alive on November 28th, 1907. This is, I think, only the second that I have seen here.

264. *GALLINULA CHLOROPUS* (Linn.).

Two or three exhausted Waterhens were caught in the gardens at Khartoum in October 1905, one on October 17th, 1906, and one or two in October 1907.

265. *PORZANA MARUETTA* Linn.

a. ♀. Khartoum, 8. 10. 07.

I have notes of weak and exhausted specimens of the Spotted Crake captured in Khartoum on October 7th, 8th, and 10th, 1906, April 25th, 1907, and many in October 1907.

266. *TURNIX LEPURANA* (Smith.).

I flushed an unmistakable *Turnix*, presumably of this species, at Dud Mavok on March 31st, 1907. I am now inclined to think that the note in my previous paper ('Ibis,' 1905, p. 386) under the head of this species should refer to *Coturnix delegorguei* Deleg.

267. *COTURNIX DELEGORGUEI* Deleg.

a. ♂. Amien, 10. 4. 07.

b. ♂. " "

I shot a female of the Harlequin Quail at Mayík on April 9th, and on the morning of the 10th I flushed several birds, and shot two males, just before reaching Amien. This was on my return journey from Wau to Meshra. Some rain had lately fallen and the young grass was springing up. When I passed over the same ground in January the country was very much dried up, and I did not see one of these pretty Quails. I am inclined to regard those that I saw in April as new arrivals.

268. *AMMOPERDIX CHOLMLEYI*.

a. ♂. Hills S. of Suakin, April 1906.

b. ♂. " " "

c. ♀. " " "

d. ♀. " " "

These pretty little Rock-Partridges were fairly common in the ravines of the hills south of Suakin. They were usually met with near water, and were generally in pairs, threes, or fours. The males mount on the top of some large boulder of rock and utter a call-note like the sharp clinking of two stones. They are very active birds, making their way rapidly up a precipitous hill-side with quick springs from rock to rock.

269. *FRANCOLINUS GEDGII* Grant.

a. ♂. Ayûm, 21. 1. 07.

b. ♂. Gardein, 8. 4. 07.

This red-legged Francolin was common on the open country between Meshra and the commencement of the

ironstone forest-country at Ayûm. After crossing the Jur River we found it entirely replaced by the yellow-legged *F. icterorhynchus*.

270. *FRANCOLINUS ICTERORHYNCHUS* Heugl.

a. ♂. Chak Chak, 18. 2. 07.

b. ♀ jr. Pongo River, 4. 2. 07.

This was the only Francolin which we saw on the ironstone country between Wau and Chak Chak. It is a better flier than the red-legged bird. It was common, and generally in coveys.

My specimens appear to differ slightly from those in the British Museum, in being rather more sparsely spotted beneath, and in lacking a small blackish patch below the eye, which was present in those that I examined.

271. *FRANCOLINUS ERCKELI* (Rüpp.).

a. ♂. Erkowit, 22. 3. 06.

b. ♂. „ „

c. ♀. „ „

d. ♀. „ 25. 3. 06.

These splendid Francolins were common on Erkowit and were heard all the way up the Kolkilai Pass. They were generally in pairs or in small parties of four or five. In the early morning and evening they were very noisy, repeatedly uttering a loud harsh call, and were then easily approached if stalked quietly. They were not very shy, and preferred walking away to flying, until shot at. On the ground they somehow reminded me of the Ruffed Grouse of North America.

272. *PTILOPACHYS FUSCUS* (Vieill.).

a. ♂. Chak Chak, 19. 3. 07.

b. ♂. Buval, 29. 1. 07.

These Stone-fowl were common in the forests of the ironstone country from Wau to Chak Chak, and between that station and Dem Zubeir. They were generally met with in parties or in pairs with broods of half-grown young. In the evening they become very noisy, uttering shrill whistling calls. When flushed by a dog they often fly up into trees.

273. NUMIDA PTILORHYNCHA Licht.

This Guinea-fowl was abundant everywhere along our route in the Bahr-el-Ghazal Province.

274. PTEROCLES QUADRICINCTUS Temm.

This Sand-Grouse was common in the vicinity of water from Meshra to Chak Chak and Dem Zubeir, coming to drink, as usual, just at or after sunset.

I took a clutch of three fresh eggs at the Pongo River on Feb. 7th.

275. LISSOTIS LOVATI Grant.

Lord Lovat's Bustard was seen at intervals between Meshra and Chak Chak, and south towards Dem Zubeir, but was comparatively scarce.

At the Khor Kobshum, Blaine took one from two Tawny Eagles which were killing it, and I shot a male near Meshra in March.

276. OTIS DENHAMI Childr.

I saw this splendid Bustard several times between Moyen and Chak Chak, but failed to shoot a specimen. The birds appeared to keep very closely to the same bit of ground, and on my return journey I generally saw them in almost the identical spots where I had marked them down two months before. They were, as a rule, extremely wary and hard to approach, but on one occasion I got within forty yards of a grand old male "displaying" in front of two females—of course, when I had no rifle with me!

277. EUPODOTIS ARABS (Linn.).

I saw this Bustard on the Bahr-el-Ghazal River, but after the ironstone country was entered *Otis denhami* was the only large Bustard seen.

278. BALEARICA CECILIÆ Mitchell.

Crowned Cranes were met with, in comparatively small numbers, on the Jur, Pongo, and Chell Rivers.

I saw no Grey Cranes inland in the Bahr-el-Ghazal Province.

279. *PHYLLOPEZUS AFRICANUS* (Gm.).

I did not myself see this Jacana, which is very abundant on the White Nile and Bahr-el-Ghazal, on the smaller rivers inland.

280. *LOBIVANELLUS SENEGALUS* (Linn.).

a. ♂. Dervish Dem, Upper Nile, Jan. 1906.

The Yellow-wattled Lapwing was met with from Mesara to Chak Chak and thence towards Dem Zubcir. I took a clutch of four eggs at the Khor Kobshum on March 6th. They were deposited on a patch of dried mud surrounded by high grass; a few small bits of earth were packed round the eggs. The specimen from Dervish Dem was kindly given to me by M. de Vilmorin.

281. *SARCIOPHORUS TECTUS* (Bodd.).

I frequently saw the Red-wattled Lapwing along our route in the Bahr-el-Ghazal Province.

282. *HOPLOPTERUS SPINOSUS* (Linn.).

I saw Spur-winged Plovers on the Jur, Pongo, and Chell Rivers.

283. *DEFILIPPIA CRASSIROSTRIS* (de Filippi).

a. Sex? Bor, Feb. 1906.

I am indebted to M. de Vilmorin for my only specimen; it was procured by him on the Upper Nile.

284. *CHARADRIUS FULVUS*.

A Golden Plover with grey axillaries was shown to me alive in Khartoum on Oct. 12th, 1905.

285. *CHARADRIUS ASIATICUS* Pall.

a. ♂. Near Ayûm, 20. 1. 07.

b. ♀. Khartoum, 11. 11. 07.

c. ♂. „ 7. 11. 07.

The specimen *a* was in nearly full breeding-plumage. It was shot from a large flock of two or three hundred birds which were on an open cotton-soil plain. They all appeared to be in the same state of plumage. This was the only time that I met with the species in the Bahr-el-Ghazal Province.

286. *ÆGIALITIS CANTIANA* (Lath.).

a. ♂. Khartoum, 4. 11. 07.

b. ♂. „ 12. 11. 07.

c. ♀. „ 13. 11. 07.

Abundant in the winter between Khartoum and the White Nile. Perhaps these African Kentish Plovers should stand as *Æ. alexandrinus* (Linn.).

287. *PAVONCELLA PUGNAX* (Linn.).

I saw some large flights of Ruff's on the open plain at Amien on April 19th.

288. *TOTANUS STAGNATILIS* Bechst.

a. ♀. Khartoum, 11. 11. 07.

289. *TOTANUS OCHROPUS* (Linn.).

I flushed the Green Sandpiper occasionally at pools and "khors" at various points along our route in the Bahr-el-Ghazal Province.

290. *TRINGOIDES HYPOLEUCUS* (Linn.).

The same remarks apply to the Common Sandpiper.

291. *GALLINAGO CÆLESTIS* (Frenz.).

a. ♂. Khartoum, 12. 11. 07.

b. ♀. „ 20. 11. 07.

c. ♀. „ „

We saw a few Snipe at various ponds and "khors" between Meshra and Chak Chak from January to the middle of March.

292. *GALLINAGO GALLINULA* (Linn.).

a. Sex? Kawa, White Nile, 27. 11. 05.

Shot, and kindly given to me, by Captain Danford, R.E. The only Soudan specimen that I have seen.

293. *ÆDICNEMUS SENEGALENSIS* Swains.

a. ♀. Chak Chak, 24. 3. 07.

This Thick-knee was common along the Jur, Pongo, and Chell Rivers.

294. *ÆDICNEMUS AFFINIS* Rüpp.

a. ♀. Lake No, 12. 1. 06.

The specimen from Lake No was kindly given to me by

M. de Vilmorin. The bird is very like the South-African *C. capensis*, but has a much shorter tarsus.

295. *PLUVIANUS ÆGYPTIUS* (Linn.).

a. ♀. Chak Chak, 19. 2. 07.

The Egyptian Plover was abundant on the sandbanks of the Jur, Pongo, and Chell Rivers.

296. *RHINOPTILUS CHALCOPTERUS* (Temm.).

a. ♀. Between Chak Chak and the Pongo, 19. 3. 07.

b. ♀. „ „ „ „ 20. 3. 07.

I only met with these pretty Plovers at one point on our Bahr-el-Ghazal journey. On February 9th I flushed three pairs of them close together. This was in the high forest, with the ground fairly open beneath the trees. They lay till almost trodden on, and then flitted up suddenly and gave a difficult twisting snap-shot among the trees. Being anxious not to damage them as specimens, I missed the birds I fired at on this occasion through giving them too much law. I did not see the species again until we camped at the same spot on our return journey. It was late in the evening, but I hurried off to the spot where I had seen them before, and soon flushed one, which I shot. It was a female, and contained an egg of full size, but with the shell not properly formed.

Early next morning as we were leaving the place I got another bird at exactly the same spot. I imagined that this would be the male, but it proved to be a second female, not breeding.

These Plovers seemed to me to be quite forest-birds. I imagine that their habits must be crepuscular, as they lie like Nightjars during the daytime.

297. *GLAREOLA PRATINCOLA* (Linn.).

a. ♂. Khartoum, 1. 11. 07.

b. ♂. „ 15. 11. 07.

I did not see the Pratincole in the Bahr-el-Ghazal Province.

298. *STRUTHIO CAMELUS* Linn.

I saw a pair of Ostriches near Mayîk on April 9th, but most of the country through which I passed in the Bahr-el-Ghazal Province was too heavily forested for them.